

DEC 22 2005

Docket No. 740124-183

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

Martin ELLER

Application No. 10/805,272

Filed: March 22, 2004

For: METHOD OF JOINING A ROD-SHAPED HEATING  
ELEMENT WITH A TUBULAR CARRIER ELEMENT,  
AND A GLOW PLUG INCLUDING A ROD-SHAPED  
HEATING ELEMENT IN A TUBULAR CARRIER  
ELEMENT

GROUP 3742

Examiner: Fastovsky

Confirmation No. 8981

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark  
Office: Fax No. 571-273-8300 on 12-22-05.

*Kathleen M. McManus*  
Kathleen M. McManus

DECLARATION UNDER 37 CFR 1.132

U.S. Patent and Trademark Office  
Customer Service Window, Mail Stop AF  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Sir:

I, Dr.-Ing. Eberhard Rauschnabel, declare that:

1. I am the managing director of the Ifutec® Ingenieurbüro für Umformtechnik GmbH, a German company working on the field of forming processes, in particular joining processes by deforming and magnetic forming processes and that I am a graduated ingenieur.

2. Based upon my experience and knowledge of magnetic pulse forming, I can state that it is a know fact that an inherent characteristic of magnetic pulse forming is that it produces no surface damage to the parts being joined if the parameters are well adjusted to the specific application and as it is a "cold" process, no thermal effects are experienced by the parts being joined by magnetic pulse forming. Furthermore, these inherent characteristics of magnetic pulse forming are well known to those of ordinary skill in the field joining components.

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3. By referencing the "Magnetopuls" process of Magnet-Physik Dr. Steingroever GmbH of Cologne, Germany, in paragraph [0006] of the above-captioned application, those skilled in the art were taught that the process taught for use in accordance with the above-captioned application would yield a product having the known characteristics of the "Magnetopuls" process as are describe in published literature about that process, such as the 1997 "Magnetopuls" brochure number 1846/97, i.e., that the product would have no surface damage and that the product would not have been subjected to any thermal effects.

3. Because of the characteristics of magnetic pulse forming noted in the preceding paragraph, parts that are joined by magnetic pulse forming, inherently, will be physically different from parts joined by conventional welding, brazing, and press fitting.

4. To my knowledge, magnetic pulse forming was not used for the joining of parts of a glow plug prior to the invention of the above-captioned application, nor were the advantages of doing so known to those working in the field of glow plug manufacture.

All statements made herein of my own knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

Date: December 16, 2005

  
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[Dr.-Ing. Eberhard Rauschnabel]